

Analysts: Soviets hit USA satellites

STATINTL

By John Hillkirk
USA Today

SAN JOSE, Calif. — The battle for control of outer space might have already begun.

Two leading analysts say the Soviet Union has fired high-energy particle beams at several USA military satellites, rendering them useless for intelligence-gathering purposes.

"It's happened at least six times since 1977," said Miles Costick, president of the Washington, D.C.-based Institute on Strategic Trade.

Costick was an associate director of *High Frontier*, the Heritage Foundation study that

is the basis for President Reagan's space-based defense plan.

The most recent incident occurred about six months ago, said John D. Shea, president of Technology Analysis Group Inc., a San Jose defense consulting firm with access to classified documents.

Yet Defense Department officials say such reports are unsubstantiated. "That's been rumored, but I haven't heard anything here about satellites being shot down," said Col. Mark Foutch.

USA satellites with damaged electronic controls were recovered and examined but no con-

clusive evidence of Soviet involvement has been found, said Bobby Inman, once director of the National Security Agency and former CIA deputy director, who is now president of Microelectronics and Computer Technology Corp.

Defense officials said it's probably coincidental that several USA reconnaissance satellites lost communication capabilities while flying over Soviet cities at low altitude.

But Costick, an expert on Soviet technology, says there is proof USA satellites were damaged by high-energy particle beams fired from a one-kilometer, 50-inch diameter gun located near the Soviet city of Semipalatinsk.

Another weapon system is hidden between Leningrad and the Baltic states, added Costick, who says he learned of the incidents from USA and Soviet government sources.

The incidents have been kept secret, Costick and Shea said, for political reasons and to prevent the Soviets from learning about the vulnerability of USA satellites. They divulged the information because they're deeply concerned about Soviet advances in outer space.

Former Brig. Gen. Robert Richardson, another member

of the *High Frontier* study team, explained: "The Soviets are moving into space as fast as they can. And anybody who controls space will control everything else."

The *Star Wars* scenario, as Silicon Valley consultants refer to it, would curb the nuclear arms race by focusing attention on a giant chess game in outer space.

Not only would satellites fight the war, they'd also control it. The USA and Soviet Union are developing artificially intelligent, so-called fifth-generation supercomputers that would direct the war maneuvers of submarines, tanks and other military equipment from outer space satellites.

Computers that can make independent decisions are essential, Shea said, because communications with conventional satellites could easily be knocked out during war by a nuclear blast in space or high in the earth's atmosphere.

Current Soviet weapons reportedly can bombard a target with an enormously powerful beam of charged electrons. "It's like a giant electronic flash," said Shea, who's helping USA defense contractors develop radiation-proof satellites.

The USA, as President Reagan revealed in March, might develop a network of 432 satellites armed with heat-seeking missiles to destroy Soviet missiles soon after they are launched.

But the Soviets, in high-energy weaponry and materials that hide satellites from radar, are eight to 10 years ahead of the USA, Shea said. To catch up, the USA plans to invest \$2 billion over the next four years in technological research and development.

Technology Group Picks Texas Site

By ROBERT D. HERSHEY Jr.

Special to The New York Times

WASHINGTON, May 17 — The city of Austin, Tex., has beaten 56 other municipal contestants in the competition to become home to a major new research enterprise headed by Bobby R. Inman, former Deputy Director of Central Intelligence, it was announced today.

The company, called the Microelectronics and Computer Technology Corporation, or M.C.C., is a joint venture of a dozen large companies that have each pledged to spend a minimum of \$50 million a year to develop high-technology products, such as supercomputers for the international market.

Austin was selected Monday from a group of four finalists that also included San Diego, Atlanta and the Raleigh-Durham-Chapel Hill research triangle of North Carolina.

The Texas city was chosen, Admiral Inman said in a telephone interview, largely because of the commitment that state businessmen and others had shown to high-technology industry, particularly computers.

"It was the commitment of their own resources to try to make it a



The New York Times/Teresa Zabala

Bobby R. Inman, head of the Microelectronics and Computer Technology Corporation.

world-class institution," he said, noting among other things that the University of Texas and Texas A & M University had agreed to endow several new chairs in computer sciences and that \$750,000 a year had been earmarked for support of graduate students.

M.C.C.'s headquarters will also be at the Austin facility, which is expected to attract other high-technology companies to the industrial

park site. Previously, it was an open question as to whether the headquarters would be at the main site.

Behind the creation of M.C.C. is William C. Norris, chairman of the Control Data Corporation, who returned from a 1981 visit to Japan persuaded that American companies had to take extraordinary steps to retain pre-eminence in computers, semiconductors and other areas of high technology. Among the other participants in the joint venture are Honeywell, Sperry, RCA and Digital Equipment.

Admiral Inman, a native of Texas, said his first choice had been San Diego because of its favorable climate, consistently good schools and the fact that it is in the same time zone as major universities where much similar research is already being done. In the end, however, there was unanimous consent for the Texas site.

The first office is expected to be opened in Austin by June 15, with research operations scheduled to begin about Aug. 1. A total of 45 to 50 employees will be recruited or lent by participating companies by fall, Admiral Inman said. Eventually, M.C.C. will employ about 400 computer scientists and engineers.

M.C.C. will not seek Government contracts because "contracts carry strings," Admiral Inman said.

STATINTL

Texas Rounds Up A Hi-Tech Prize

By Dan Balz

Washington Post Staff Writer

AUSTIN, May 17—An advanced computer research consortium formed to assure U.S. technological superiority over the Japanese said today that it would establish its headquarters here in the Texas capital after being sought avidly by 52 cities in 22 states.

The company, Microelectronics and Computer Technology Corp. (MCC), a consortium of 12 U.S. firms that is headed by former CIA deputy director Bobby Inman, plans to spend up to \$150 million a year on what it hopes will be the most advanced computer research in the world.

"Years from now we will look back and realize this was a turning point for our state and the beginning of a new spirit for this nation's technological development," Texas Gov. Mark White said in a statement applauding MCC's decision to move to Austin to design the next generation of computer technology.

Austin, with its strong engineering program at the University of Texas, a well-educated work force and attractive living conditions, has lured a large number of high-technology firms over the past decade. MCC's move will put the city into the front ranks of the computer world, along with California's Silicon Valley, Route 128 around Boston, and North Carolina's Research Triangle.

MCC is considered one of the most significant joint ventures ever launched by U.S. corporations. If the plan to pool research and development costs and share the results proves effective, MCC could become a model for other American industries seeking to combat growing worldwide competition. "The advent of cooperative R&D is the most significant step forward [in the computer industry], since large-scale integration lowered the cost" of computers and improved the productivity of the industry, said MCC spokesman Bill Shaffer.

One of the losers in the final round of

bargaining over the site was Atlanta. "I gather Texas bought it," said Mayor Andrew Young. "I was convinced these were men of wisdom and intelligence who knew which way the world turns. I can't imagine why anyone would want to go to Austin when they could come to Atlanta."

California, another loser in the final round along with North Carolina's Research Triangle, has seen a number of high-tech companies in the Silicon Valley expand their operations to other states. This time the state made a concerted effort to recruit MCC to San Diego. Gov. George Deukmejian personally intervened on the city's behalf. He was not in Sacramento when Inman announced MCC had chosen Austin and had no immediate comment.

Texas put together a package of incentives designed to lure MCC to Austin. The package included a promise to strengthen the computer science and computer chip engineering programs at both the University of Texas in Austin and Texas A&M University in College Station, one of the first cooperative efforts between the two intensely competitive institutions.

Texas also promised to add endowed professorships at UT and Texas A&M, to increase laboratory space for microelectronic engineering and research and provide MCC space in UT's Balcones Research Center in Austin, at minimal cost.

MCC is the brainchild of William Norris, chairman of Control Data Corp. of Minneapolis. It was formally launched last January and has set for itself an aggressive timetable. Plans call for MCC to begin operations in Austin in September. Eventually, several hundred will be employed.

The company will concentrate on four areas of research: advanced computer architecture, or the design of new hardware, including a fifth-generation computer; software technology; computer-aided design and computer-aided manufacturing for electronics; and component packaging. Among members of the consortium, in addition to Control Data, are Honeywell Inc., Motorola Corp. and RCA Corp.

Special correspondents Anna Bennett

this report.

STATINTL

Ex-spy deals in high-tech secrets now

By John Hilkirk
USA TODAY

ARLINGTON, Va. — Bobby Inman spent 30 years at the CIA and other USA intelligence services worrying about "the enemy." He used top-secret technologies to set up a world-wide spying network.

Now, as president of a history-making research partnership, he still deals in secret, though unclassified, USA technologies. European and Japanese electronics companies — not the Russian KGB — are the competitors concerning him.

"I've turned from the world of the classified to the world of the proprietary," said Inman, president of Microelectronics and Computer Technology Corp., an 8-month-old research venture in which 12 USA companies have banded together to fight foreign competitors. "The two worlds are a lot more similar than I thought."

MCTC's purpose: develop proprietary computer and semiconductor technologies into prototypes that can be made into profitable product lines by sponsoring companies.

Once Inman was scrutinized, as was the entire CIA, by Congress and the news media. The nature of MCTC has made his new job just as controversial and challenging. Cooperative research, in a country that prides itself on free competitive enterprise, is scorned by

some, distrusted by others and inevitably questioned on anti-trust grounds.

Never have so many USA firms combined to sponsor what could become an \$80 million-a-year research venture. "If this works, other industries will certainly follow suit," Inman said.

By bringing together some of the USA's best scientific minds within and outside the sponsoring firms, the venture could help the USA re-establish itself as world leader in the fast-paced electronics industry. The scarcity of talent is "as big a factor in doing this as anything else," said William Shaffer, spokesman for Control Data Corp., one of the sponsors.

Employees of sponsoring companies are likely to be "on a round-trip ticket" that will allow them to learn, then return to work with new technologies, Inman said. He expects the highest caliber: "They aren't going to send less than the best."

As a result, MCTC proponents say, new technologies will be developed faster, resulting in products that beat foreign competitors into the world marketplace.

"Our best measuring rod," Inman said, "will be the (corporate) profits that result from our technologies."

MCTC was conceived by Control Data Chairman William C. Norris in late 1981. Nor-

CONTINUED